

Modern Plastics

Editorial Index, Volume 51

January through December 1974

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How to use this index

This Modern Plastics Index is prepared as a cross-referenced guide to general, engineering, and technical features. It is arranged by materials, application areas, processing equipment and methods, and other pertinent subdivisions. In addition, many subjects are individually cross-referenced by one or more key words.

■ If you want to locate in one segment of the index all the important published information, for example, **Epoxies**, **Building and Construction**, or **Blow Molding**, locate the appropriate bold face headings, under which you will find the entire list.

■ If you are looking for a specific article dealing with a plastics material, a production method, and/or an application, it will be found cross-referenced under one or all of these areas.

■ If only the general theme of an article is known, you can quickly locate it by checking through the headings relating to that theme.

■ For added convenience in reference, the following keys in indexed items indicate the nature of the indexed article or the section of the magazine in which it appears: (pl) = Plasticscope; (nm) = New Materials; (ie) = Idea Exchange; (eng) = Engineering Feature; (tech) = Technical Feature; (ma) = Machinery and Equipment; (tr) = Technical Review. Unkeyed items are of a more general nature.

Note: Every issue of Modern Plastics carries a number of timely news articles which are not considered as reference material and are not included in this Index. These include many Plasticscope announcements, Company News items, Books and Bulletins, a calendar of Coming Events, Legal Exchange, Free Literature, and Patents.

Modern Plastics

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 Autoflex profile control system (pl): Jan 88
 Continuous corrugators, NRM (ma): May 110
 Counter-rotating, Fellows (ma): Jan 96
 Exhibited at Europlastique 74: Aug 48
 Extruder heads for pipe (pl): Jan 90
 Laboratory, Olympia (ma): Oct 104
 Laboratory and school model, Scott (ma): Sept 128

Sales statistics, 1973 vs. 1972: Apr 48
 Twin-screw, for blow molder, Alfing (pl): Jul 80
 Twin-screw, for pipe, Egan (ma): Mar 100
 Twin-screw, Lester (ma): Dec 86
 2-in., Welex (ma): Sept 126

F

Feedstocks

Benzene shortage limits styrenics: Jun 66
 Coal-based plastics in 20 years (tr): Jun 196
 Corco expands capacity (pl): Jan 112
 Energy stockpile has hidden wealth (pl): Jun 70
 Ethylene expansions at home and abroad (pl): Oct 16
 Ethylene holds key to LDPE growth: Aug 42
 Ethylene overcapacity coming? (pl): Aug 12
 Ethylene recovery project (pl) Jun 131
 Ethylene shortage slows HDPE growth: Jul 53
 Ethylene, VCM shortages limit PVC: May 44
 Global expansions noted (pl): Nov 138
 Heavy liquids to dominate ethylene in 1980s (pl): Nov 22
 Hydrocarbon and VCM feedstock shortages curtail specialty plastics (pl): Jun 22
 Isocyanate developments (pl): Sept 156
 Mexico reaches for export position in petrochemicals (pl): Jan 18
 More styrene monomer coming (pl): Oct 16
 Nylon feedstock due in 1976 (pl): Nov 142
 OSHA ruling on VCM exposure levels (pl): Nov 20
 Oil shortage will affect plastics markets: Mar 5
 Phenolics supply status report: Oct 64
 Polyester feedstock due in 1976 (pl): Nov 142
 PVC plagued by feedstock shortage (pl): May 10
 Prices rise faster than resins (pl): Jun 18
 Propylene shortage limits PP growth (pl): Jan 14
 Propylene tightness limits PP growth: Sept 78
 Styrene monomer capacity growth: Jun 67
 Urethane supply status report: Dec 60
 VCM regulations change PVC outlook (pl): Oct 20
 What next for VCM? (ed): Nov 49

Fibers

Heat- and flame-resistant (tr): May 198
 Output in 1973 (tr): Oct 178
 Reclaimed waste adds to supply: Feb 38
 Ultrasonic drilling of boron fiber composites (tech): Jun 88

Fillers and reinforcements

Asbestos, for thermoplastics (nm): Jul 22
 CaCO₃ aided by new coupling agent (tech): Dec 68
 Exhibited at Europlastique 74: Sept 88
 Glass fiber facilities expand (pl): Oct 119
 Glass fiber roving (nm): May 24
 Glass microspheres in syntactic foam (nm): Mar 22
 Heat- and flame-resistant fibers (tr): May 198
 Low density resin (nm): May 24
 Mineral-wool fibrous (nm): May 18
 RP resin extender (nm): Oct 36
 Resin stretching to beat shortages: Jan 50
 Roving in giant package (nm): Feb 26
 Silane adhesion promoter (nm): Oct 36
 Silane-treated silica, Novakup (nm): Oct 36
 Wood fillers for thermoplastics: May 54

Film and sheet

Adiabatic extrusion blowing system for (ma): Mar 100

- Blown film line for HDPE (pl): Apr 108
 Celanese expands polyester plant (pl): Dec 106
 Cellulose acetate butyrate sheet as machine safety guard (ie): Aug 30
 Controls save material in processing: Apr 72
 Corrugated sheet finds new markets: Mar 46
 Cushioned, for beach mat (pl): Apr 156
 EVA copolymer for (nm): Feb 24
 Expanded honeycomb core sheet (nm): Jul 26
 Extruded UHMWPE sheet (nm): Nov 31
 Extrusion gage control system (pl): Jan 88
 Flame-retardant PE sheet (nm): Sept 40
 Flexible bulk containers (pl): Aug 91
 Metallized films have bright future: Dec 42
 Microporous polymeric (tr): Jul 144
 Microporous PVC, PP (nm): Dec 24
 PC sheet in roll form (nm): Apr 29
 Polyester decorates kitchen utensils (ie): Dec 36
 Polyester heats mobile homes (pl): Jun 135
 Polyester moves into new markets: Sept 80
 Polyester, prestabilized (nm): May 21
 PE/urethane lamination for packaging (nm): Jan 26
 Polyimide parts and tape (nm): May 21
 Polyolefin shrink film (nm): May 21
 Shrink-film pallet wraps no fire hazard (pl): Feb 16
 Single-ply PE cushioning (nm): May 21
 Solar heating/cooling system: Feb 43
 Spunbonded sheet products (tr): May 200
 Thermoplastic elastomer (nm): Dec 26
- Finishing equipment**
 Abrasive part cleaner, Empire (ma): Sept 132
 Die grinder, Nitto (ma): Sept 132
 Plasma process surface treater, LFE (ma): May 118, Sept 132
 Tumbling barrel, APM (ma): Jan 98
- Flame retardants**
 Alumina capacity increased (pl): Apr 140
 Brominated aromatic derivatives (nm): Apr 27
 For PE (nm): Sept 40
 New class of (nm): Apr 27
 Organic bromide efficiency in PUR foam (tr): Jan 166
 Reactant fire-retardant modifier (tr): Jun 196
 Report on: Sept 58
- Flammability**
 Correlation with oxygen index (tr): Sept 224
 Fire-safe TV cabinets: Sept 74
 Foam-flammability issue settled? (pl): Sept 30
 New UL flame rating (pl): Sept 148
 PE sheet is flame-retardant (nm): Sept 40
 Quantitative evaluation of (tr): Sept 224
 Shrink-film pallet wraps no fire hazard (pl): Feb 16
 Smoke evolution from thermoplastics (tr): Nov 214
 Urethane foams meet challenge: Jun 73
- Fluoroplastics**
 Extruded tubing (nm): Sept 44
 FEP insulates subways (pl): Mar 120
 Fluoroelastomers in development stage (tr): Apr 214
 Reinforced with Tefzel (nm): Oct 26
 Tube connectors (ie): Sept 50
- Foamed plastics**
 Acoustical (nm): Jun 32
 Acrylic foam commercial in Europe: May 64
 Big breakthrough coming for engineering foams (pl): Dec 16
 Bottle caps (pl): Sept 160
 Closed-cell urethane (nm): Sept 40
 Controls save materials in structural foam molding: Apr 70
 Crosslinked PP (nm): Apr 29
 Disposal of packaging foam waste by military (tr): May 198
- Disposal of PUR foam waste from autos (tr): May 200
 Filament-reinforced synthetic wood (pl): Sept 118
 Flammability issue settled? (pl): Sept 30
 Foamax flexible urethane process licensed (pl): Oct 96
 Foamax system makes flexible urethane (pl): May 102
 Furniture uses of PP: May 47
 HDPE foam conduits for telephone lines (pl): May 132
 HDPE structural foam makes road barrier (ie): Jun 38
 Hydrophilic urethane foams with water (nm): Sept 34
 Interlocking urethane panels make mobile home (pl): Feb 104
 Japanese technology aimed at wood markets: Jan 64
 Liquid blowing agents for structural foam (nm): Jun 30
 Low-pressure sandwich molding of structural foam: Apr 58
 New foaming agents for: Mar 42
 Organic bromide flame-retardance efficiency in PUR systems (tr): Jan 166
 Pallets get big jobs (pl): Aug 86
 PE, for packaging (nm): May 21
 PE, perforated (nm): Aug 25
 PE/urethane lamination for packaging (nm): Jan 26
 PP extruded braiding for mats, baskets (ie): Oct 40
 PP molds thick parts (nm): Mar 22
 PS consumption statistics, '73 vs. '72: Jan 44
 PS foam recycled (pl): May 98
 PS food chest (ie): Nov 42
 PS insulates Alaska pipeline (pl): Oct 116
 PS pallet legs (pl): Jun 137
 PS replaces wood for tool handle (ie): Jul 32
 PS window frames (pl): Dec 112
 PVC powder for cellular profiles (nm): Jan 24
 Radio chassis molded of PS structural foam (ie): Oct 40
 Recycling method for urethane (pl): Dec 82
 RP/urethane foam panels molded under vacuum: Jan 56
 Reaction injection molding as processing option: Jun 54
 Resin saving by extruded foam: Mar 41
 Reticulated urethane absorbs noise (ie): Aug 30
 Shredder, Franke (ma): Nov 122
 Solar heating/cooling system: Feb 43
 Stabilizers for (nm): Apr 27
 Structural foam future prospects: Mar 38
 Structural foam molding with counterpressure (tr): Jul 144
 Structural foam reusable pallets (pl): Feb 110
 Syntactic flexible urethane (nm): May 21
 Thermofoaming—new molding technique: Jul 47
 Thermoset foam potentials examined: Jun 64
 Transformer housing saves weight (pl): Aug 91
 United Foam's new plants (pl): Aug 86
 Urethane, coating for (nm): Aug 25
 Urethane cold storage/fire door (pl): Nov 14
 Urethane consumption statistics, '73 vs. '72: Jan 44
 Urethane copolymer (nm): Jun 30
 Urethane cores for window frame profiles: Oct 58
 Urethane cushions molded automatically (pl): Sept 120
 Urethane insulates, bonds in mobile home (ie): Apr 36
 Urethane insulates cryogenic tank (ie): Jun 40
 Urethane insulates hot-oil pipeline (pl): Nov 146
- Urethane low density (nm): Jan 26
 Urethane meets challenges: Jun 73
 Urethane-metal panels insulate oil tanks (pl): Nov 146
 Urethane packaging foam (nm): Sept 40
 Urethane sales statistics, '73 vs. '72: Jan 38
 Urethane stops chemical spills (tr): Mar 168
 Urethane structural foam wall system (ie): Feb 30
- Foam molding machinery and equipment**
 Low-pressure structural foam, Wilmington (ma): Apr 120
 Sales statistics, 1973 vs. 1972: Apr 48
 TAF technology for (pl): Jun 108
- Foaming agents**
 Colorant with (nm): Feb 24
 For thermoplastics (nm): Aug 25
 Liquid, for structural foam (nm): Jun 30
 New agents for new foams: Mar 42
 Report on: Sept 73
- Forming — see Thermoforming**
- Furniture**
 European developments: Mar 54
 Market trends forecast: Jan 5, Feb 5, Mar 5, Apr 5, May 5, Jun 5, Jul 5, Aug 5, Sept 5, Oct 5, Nov 5, Dec 5
 Moderate sales increase predicted (pl): Dec 20
 Plastics in, '73 vs. '72: Jan 46
 PP foam in: May 47
 Resin shortage felt (pl): Jul 16
 Vinyl upholstery fabrics (nm): Apr 29
- Gages — see Sensors, Control equipment**
- Glass**
 Chopper-dispenser, Binks (ma): Nov 122
 Copper-clad glass-epoxy laminate board (nm): May 21
 Fiber insulates Alaska pipeline (pl): Oct 116
 Fiber roving (nm): May 24
 Glass-polyimide laminate for circuit boards (nm): May 24
 Roving reinforcement in giant size (nm): Feb 26
- Glazing**
 Acrylic resin for (nm): Apr 25
 PC laminates for security (nm): Nov 31
 Storm-door glazing leads to distributor profits: May 53
- Glues — see Adhesives**
- Granulators — see Size reduction equipment**
- H**
- Heat sealing — see Sealing machines and equipment**
- Heating and cooling equipment**
 Axial heat pipes, Hughes (ma): Feb 98
 Bench-top chiller, Haake (ma): Sept 136
 Cartridge heaters, Ogden (ma): Jan 98, Nov 120
 Chiller-filter, Sea-Lake (ma): Jun 118
 Chiller for processing equipment, Thermolator (ma): Jan 98
 Chillers, AEC (ma): Nov 120
 Dielectric preheaters, Batson (ma): Jun 116
 Electric ovens, Grieve (ma): Jan 98
 Encapsulated flat-plane, Farnam (ma): Jun 118
 Evaporative cooling system, Hydr-O-Thrift (ma): Nov 120
 Evaporative cooling tower systems, Thermolator (ma): Nov 120

Heater bands, IHC (ma): Jun 118
 Heat-transfer system, Chromalox (ma): Jan 98
 Infrared-radiant panel heaters, OAL (ma):
 Nov 120
 Internal cooling techniques for blow molding
 (pl): Feb 90
 Lab furnaces, Blue M (ma): Aug 82
 Liquid heaters, Edwards (ma): Feb 98
 Mica band heaters, Fast Heat (ma): Sept 136
 Portable chillers, AEC (ma): Jun 118
 Portable chillers, IRC (ma): Jun 118
 Quartz immersion heaters, OAL (ma): Jun 116
 Systems, Super-Trol (ma): Jun 118
 Wraparound drum heater, Acra (ma): Dec 88
 Wraparound heater element, Sierracin (ma):
 Sept 136

Hot stamping — see *Decorating and decorative applications*

Household and housewares

Acrylic modular shelving (ie): Jan 32
 Cast urethane foam wall system (ie): Feb 30
 Collapsible kitchen in structural foam (ie):
 Sept 48
 Color safety problems in: Oct 66
 Disposables, future of: Jun 50
 Housewares Show, report on (pl): Mar 110
 Market trends forecast: Jan 5, Feb 5, Mar 5,
 Apr 5, May 5, Jun 5, Jul 5, Aug 5, Sept 5,
 Oct 5, Nov 5, Dec 5
 Plastics in, '73 vs. '72: Jan 46
 PC fire extinguisher handles (pl): Feb 110
 Polyester film decorates kitchen utensils (ie):
 Dec 36
 PP extruded foam braiding for mats, baskets
 (ie): Oct 40

Housing — see *Building and construction*

I

Injection molding

Abuse tolerances for reinforced polyester
 (eng): Jun 80
 Computer interface (ma): Apr 130
 Computer model for RIM formulations (pl):
 Dec 82
 Control system for (pl): Jul 76
 Controls save materials: Apr 66
 End modification kit, HPM (ma): Sept 126
 Liquid injection molding seeks uses (pl):
 Mar 90
 Lubricant for liquid injection molding (nm):
 Sept 36
 Molding area diagram approach to thermoset
 molding (eng): Jul 62
 Reaction injection molding, processing option:
 Jun 54
 Sprue bushings save resin (pl): Jan 90
 Transient melt temperatures detected (tech):
 May 78
 Vented barrel benefits cited (pl): Aug 72
 Warm runner, for thermosets (eng): Sept 96
 Where big machines are going: Jun 69

Injection molding machines and equipment

Adaptive controls for, Kontrols (ma): Oct 108
 Exhibited at Europlastique 74: Aug 46
 Fast-cycling, Impco (ma): Oct 102
 Fast-cycling, Stokes (ma): May 110
 Filter inserts between barrel and nozzle (ma):
 Apr 118
 500-ton, Farrel (ma): Dec 86
 High-speed, Van Dorn (ma): May 112
 Horizontal, Impco (ma): Jan 96
 Horizontal ram, Hull (ma): Apr 118
 Hydraulic clamp, Farrel (ma): Jul 84
 Insert molding, Avnet (ma): Mar 100
 Injection press, Boy (ma): Nov 114
 In-line plasticators, Egan (ma): Nov 114
 Iso-Nozzle mixing nozzle (ma): Sept 128
 Low-profile, for thin-wall parts, Beloit (ma):
 Jul 84

Molding attachment, Carver (ma): Feb 94
 OSHA safety rules for (pl): Jun 104
 1-oz., Hillard (ma): Dec 86
 Part ejection systems: May 66
 Reciprocating screw, Trubor (ma): Sept 126
 Sales statistics, 1973 vs. 1972: Apr 48
 Screw-injection machines, Polymer (ma):
 Apr 118
 Screw plasticating, Polymer (ma): Oct 102
 Semiautomatic, Autojectors (ma): Feb 94,
 Sept 126
 Semiautomatic, Honatech (ma): Feb 94
 Semiautomatic vertical, Hillard (ma): Jul 84
 Small presses, Toyomenka (ma): Feb 94
 Stokes rotary 4-station (pl): Dec 76
 Stuffer loads RP (ma): Nov 114
 Three tie rod, Stokes (ma): Oct 104

Injection-blow molding

For beverage bottles (pl): Apr 106
 Four-station, Graham (ma): May 110
 Four-station machines start trend (pl): Mar 90
 Nursing bottles produced by (pl): May 104
 Three-station, Rainville (pl): Jun 106

Inserts

Ultrasonic method for metal parts (eng):
 Feb 62
 Ultrasonically embedded in thermosets (tr):
 Nov 214

Ionomers

Automotive, packaging, sporting goods uses
 (pl): Jan 115
 New markets for (pl): Mar 18

Isocyanates — see *Urethane*

J

Japan

Foam technology for wood replacements:
 Jan 64
 Industry review '73: Jan 61
 Japanplas '74 preview: Oct 60
 Starch-based polymer developed (nm): Apr 20

Jewelry

Plastic watch case markets grow: Aug 44

L

Laminates and laminating

Copper-clad, for printed circuits (nm): Dec 26
 Copper-clad glass-epoxy board (nm): May 21
 Epoxy, flexible copper-clad (nm): Jul 29
 Glass-polyimide, for circuit boards (nm):
 May 24
 Melamine component panels (pl): Sept 160
 New types introduced at Furniture Fair (pl):
 Sept 148
 PC laminates for security glazing (nm):
 Nov 31
 Press pads for (nm): Feb 26
 Sound-damping (nm): Apr 29
 Pneumatic, Press Systems (ma): Jul 84
 Transverse laminator for twist-close bags (ma):
 Nov 120

Lasers

New tool for processors: Aug 38

Lighting

PP housing for vehicular warning light (ie):
 Feb 32
 Swiss expertise available (pl): Jul 99

Lubricants

For injection molding (nm): Sept 36
 For liquid injection molding (nm):
 Sept 36
 Octadodecyl stearate (nm): Feb 24
 Pelletized stearate concentrates (nm): Jan 24
 Polymeric (nm): Mar 27
 Report on: Sept 72

M

Machinery and equipment — see also
specific types

Bagmaking, PI (ma): Mar 102
 Capital investments, sales up (pl): Aug 70
 Edge and end bander, Holz (ma): Mar 104
 Energy-saving equipment (pl): May 96
 Flow molding, Thermatron (ma): Jan 98
 Fluids-filtering systems, Serfilco (ma):
 Dec 86
 Hydraulic system trouble-shooting (eng):
 Mar 64
 Japanese machinery sales, '73: Jan 63
 Leasing vs. buying: Mar 52
 Packaging machinery at PMMI Pack Expo 73
 (pl): Mar 94
 Sales statistics, 1973 vs. 1972: Apr 48
 Thread-milling machine for molds (ma):
 Apr 122

Machining

Diamond-powder tools for RP (pl): Sept 118
 Lasers are new tool for processors: Aug 38

Markets

Automotive increases for plastics at SAE auto
 show: Apr 55
 Barrier bottles for carbonated beverages,
 outlook for (pl): Aug 14
 Calendaring is more than vinyls: Jun 61
 Consumption statistics, '73 vs. '72: Jan 39
 Disposables, forecast for future: Jun 50
 Electroplating growth continues: May 40
 Engineering foams ready for big breakthrough
 (pl): Dec 16
 Furniture makers feel resin pinch (pl): Jul 16
 Hercules bets on PP in packaging (pl): Oct 114
 HDPE pails, future of: May 48
 Hot stamping moves in new directions: Oct 52
 Metallizing gains favor: Dec 42
 New lineup in thermoplastic elastomers:
 Dec 50
 Plastic pallets are set to grow: Nov 58
 Plastic watch cases double in volume: Aug 44
 Plastics move into electrical outlet boxes:
 Oct 56
 Plastics outlook improving in automotive
 industry: May 5
 Polyester film moves in new directions:
 Sept 80
 PE drums, growth of: Jul 48
 Powder coating on plastics: Nov 66
 Printing plate markets grow: May 56
 Pultrusion heading for boom in 1974: Feb 48
 Recreational vehicles use more plastics:
 Nov 62
 Thermoplastic polyester set for big gains:
 Dec 54
 Toys use high-performance plastics: Dec 47
 Trends forecast: Jan 5, Feb 5, Mar 5, Apr 5,
 May 5, Jun 5, Jul 5, Aug 5, Sept 5, Oct 5,
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 Where big machines are going: Jun 69
 Wire and cable is growth market for plastics:
 Nov 50

Materials handling

Air activator, Monitor (ma): Jun 118
 Belt conveyor for extruded profiles,
 Extrudyne (ma): Feb 96
 Big jobs for plastics (pl): Aug 86
 Bridge breaker screen, Thayer (ma): Apr 124
 Continuous sampler for conveyors, Anacon
 (ma): Jun 118
 Conveyor for powders and chips, AIM (ma):
 Apr 124
 Conveyor for runners and parts, IMS (ma):
 Oct 106
 Electronic batching system, Streeter (ma):
 Feb 96

4-in. Flexifeeder, AIM (ma): Feb 98
 Hopper loaders, PMC (ma): Jun 118
 In-transit static elimination, Simco (ma): Feb 96
 Machine loader, Butler (ma): Apr 124
 Modular assembly stations (ma): Feb 96
 Nestable bins, USS (ma): Oct 108
 Parts removal conveyor, Beloit (ma): Oct 104
 Parts separator-conveyor, New London (ma): Jul 88
 Portable inclined screw conveyor, Duplex (ma): Feb 98
 Powder conveying system, Tri-Clover (ma): Oct 108
 Pump for molten plastics, Luwa (ma): Oct 106
 Rotary gear pump, Luwa (ma): Apr 124
 Screw conveyor, Axios (pl): Jul 80
 Sealed system for urethane elastomers (ma): Feb 96
 Shuttles for sealing presses, Sealomatic (ma): Feb 96
 Slide gate discharge, Dustex (ma): Jun 118
 Stacking hoppers, Hodge (ma): Jun 122
 Vacuum belt conveyor, Herr-Voss (ma): Apr 124
 Vacuum/pressure conveyor, Whitlock (ma): Jun 118
 Vibratory separator, Sweco (ma): Oct 108
 Weighing and batching systems, Brookline (ma): Apr 122

Medical applications

Disposables, future of: Jun 50
 Electronic thermometer, PC, ABS (ie): Mar 32
 HDPE artificial knee implant (pl): Nov 151
 HDPE hips and knees (tr): Feb 168
 Joint replacement prosthesis (tr): Oct 178
 LDPE film supports burn victim for hydrotherapy (pl): Nov 146
 Spunbonded PE catheter package (pl): May 135
 Standards for plastic devices (tr): Jun 196
 Standards for plastics (pl): Oct 116

Melamine

Consumption statistics, '73 vs. '72: Jan 44
 Filled resins (nm): Jun 28
 Laminated panels (pl): Sept 160
 Production statistics, 1972-1973 (tr): May 198
 Sales statistics, '73 vs. '72: Jan 38
 Supply status report: Nov 65

Mergers

Decline noted (pl): Nov 142

Metallizing — see *Plating and metallizing*

Metering, mixing, dispensing equipment

Coloring blender, Colortronic (ma): Aug 78
 Continuous weigh feeder, K-tron (ma): Nov 122
 Diosna universal mixers, Tedruth (ma): Aug 78
 DIS screw homogenizes melt (pl): Sept 116
 Discharge system, Duplex (ma): Apr 124
 Dispensing system valve, EFD (ma): Nov 122
 Dry powder blower, Venus (ma): Dec 90
 Electronic weighing system, Martin-Decker (ma): Aug 78
 Electronic weight indicators, Detecto (ma): Sept 136
 Electro-pneumatic dispenser, EFD (ma): Jun 114
 Exhibited at Europlastique 74: Aug 54
 Filament winding bath, Venus (ma): Apr 124
 Glass chopper-dispenser, Binks (ma): Nov 122
 Heating-cooling mixer, Abbe (ma): Jun 114
 In-line mixer for SMC (ma): Nov 122
 Intensive internal mixers, Teledyne (ma): Sept 132
 Laboratory intensive mixer, Nerpco (ma): Apr 122

Laboratory mixer, Nerpco (ma): Dec 90
 Liquid mixer, Venus (ma): Jun 114
 Metering-dispensing system, Tridak (ma): Jun 114
 Micro-Pump, Neptune (ma): Jun 114
 Mini digital weigh feeder, K-tron (ma): Aug 78
 Mixer-disperser, Mastermix (ma): Apr 124
 Mixer-reactor, Ecar (ma): Jun 114
 Mixing-cooling systems for PVC (ma): Apr 122
 Portable blenders, Abbe (ma): Dec 90
 Potting, encapsulation system, Kenics (ma): Jun 114
 Programmable, Fassauer (ma): Dec 88
 Programmable batching system, Streeter (ma): Dec 90
 Ribbon blender, Gatto (ma): Sept 136
 Ribbon blenders, Perry (ma): Apr 122, Dec 90
 Sealant extruder, Hardman (ma): Sept 132
 Sprayup gun, Johnson (ma): Apr 124
 Sprayup system for RP (ma): Apr 122
 Sprayup unit saves resin (pl): May 104
 Twin-screw mixer, W&P (ma): Jun 114
 Two-component, Kenics (ma): Aug 78
 Two-component liquid dispenser (ma): Apr 120
 Urethane foam, Witco (ma): Dec 90
 Weigh feeder, Acrison (ma): Apr 122

Methyl methacrylate — see *Acrylics*

Metritication

House fails to pass bill (ed): Jul 39

Mexico unveils export plans for petrochemicals (pl): Jan 18

Molds and dies

Automated mold factory (pl): Mar 92
 Cartridge heaters for (ma): Jan 98
 Cavities, determining optimum number (eng): Nov 74
 Cavity-punching tools provide thermoforming economies: Oct 68
 Coextrusion die, Lowey (ma): Apr 122
 Dual extrusion die, Lowey (ma): Jun 116
 18-in. extrusion die (pl): Jan 90
 Gage control via extruder die bolts (pl): Jan 88
 Handling cart hovers on air layer (pl): Jul 76
 Heater bands for (ma): Jun 118
 Injection test mold, Control Process (ma): Oct 106
 Moldmakers' shortage offset by automation, etc.: Aug 34
 Nonreactive release agents for urethanes (nm): Aug 25
 Release agent, nonburning (nm): Feb 26
 Sheet and film dies, Johnson (ma): Jun 114
 Silicone rubber mold material (nm): Dec 33
 Slide retainer for mold standardization (pl): Jun 104
 Spiderless die head, Gatto (ma): Jun 116
 Spray guns for mold release, IMS (ma): Jun 116
 Sprue bushings save resin in injection molding (pl): Jan 90
 Thread-milling machine for (ma): Apr 122
 Ultrasonic degating of parts (pl): Nov 106

N

Nitrile-based resins

Activity in (pl): Jul 96
 Barrier bottles for carbonated beverages, outlook for (pl): Aug 14
 DuPont quits resin production (pl): Sept 32
 DuPont's given new name (pl): Feb 106
 Ecological impact of bottles studied (tr): May 200
 Foods-safety issue (pl): Dec 18
 Lightweight barrier bottles (pl): Sept 30

Lopac meets toxicity and ecology questions (pl): Jan 16

Noise

Acoustical foam (nm): Jun 32
 Reticulated urethane foam absorbs noise (ie): Aug 30
 Sound-dampening laminate (nm): Apr 29
 UHMWPE sound-dampening tube for machines (pl): Apr 108

Nylons

Air-supported structure speeds roof spraying (ie): Dec 36
 Antioxidants for (nm): May 18
 Bubble cushioning material (nm): Jan 26
 Chemical resistance performance tested: May 60
 Coating powders (nm): Mar 30
 Conductive reinforced (nm): Sept 34
 Consumption statistics, '73 vs. '72: Jan 39
 Fiber output, 1973 (tr): Oct 178
 Flexible bulk containers (pl): Aug 91
 Flexible transparent (nm): Sept 34
 Glass-reinforced grades (nm): Apr 25
 Powder-coating on accelerator pedal component (ie): Jan 30
 Production statistics, 1972-1973 (tr): May 198
 Reinforced composite molded on metal-stamping equipment (tech): Nov 82
 Sales statistics, '73 vs. '72: Jan 38
 Transparent grade makes US debut (nm): Mar 22

O

Optical

Coating for PC (nm): Feb 26
 Coatings for PC and acrylic (nm): Mar 30

Organic peroxides

Polymerization initiator (nm): Feb 24
 Report on: Sept 68

Ovens

Batch and conventional, Blue M (ma): Dec 88
 Conveyor-type, Grieve (ma): Jun 116
 Electric, top-loading (ma): Jan 98
 Electrical, for hazardous applications (ma): Feb 98
 Preheating, curing, Bayco (ma): Jun 116

P

Packaging applications

Adhesives for (nm): Jun 32
 Aerosol dispensing agent is product (ie): Sept 48
 Barrier bottles for carbonated beverages, outlook for (pl): Aug 14
 Butadiene styrene thermoformed vend package (pl): May 138
 Capless dispensing closure for tubes (pl): Oct 124
 Childproof blister pack (pl): Aug 93
 Disposal of packaging foam waste by military (tr): May 198
 Drum market booming: Jul 48
 Environmental tests show plastics' superiority: Apr 56
 FDA toughens PVC extraction test rules (pl): Jun 22
 Foam bottle caps (pl): Sept 160
 Forming system, Weldotron (ma): Aug 82
 Hercules bets on PP (pl): Oct 114
 HDPE shipping container is waterproof (ie): May 30
 Ionomer pouch for dry milk (pl): Jan 115
 Low density PE foam for (nm): May 21
 Machinery at PMMI Pack Expo 73 show (pl): Mar 94
 National Packaging Exposition, report on (pl): Jun 126

Plastics in, '73 vs. '72: Jan 46
Plastics' major growth area in 1975 (pl): Dec 20
Polyester film market: Sept 80
PE extruded tube multipack (pl): May 135
PE/nylon bubble cushioning (nm): Jan 26
PE/urethane lamination for (nm): Jan 26
Reuse ideas for bottles, boxes (ie): Oct 44
Safety data need on PVC food packages (pl): Feb 18
Thermoformed PE/PP oil can (pl): Jan 116
Toxicity questions on PVC meat-wrap film (pl): Mar 16
Truck wrapped in air-bubble cushioning (pl): Dec 112
Urethane cushioning foam (nm): Sept 40

Pails
Compression-molded reinforced polyester (ie): Jul 34
HDPE giant-size pail (pl): Apr 156
HDPE pail, future of: May 48

Paints and painting
Elastomer painting system (pl): May 104
Mask washing machine, Service Tectonics (ma): Jan 98

Pallets
Big jobs for plastics (pl): Aug 86
Plastic pallets are set to grow: Nov 58
PS foam pallet legs (pl): Jun 137
Reusable structural PS foam (pl): Feb 110
Shrink-film wraps no fire hazard (pl): Feb 16

Paper
HDPE with inorganic fillers (nm): Aug 25
Plastics recycled as (tr): Dec 154

Pelletizers —see Size reduction equipment

Pens and pencils
Acetal spring replaces metal in ballpoint pen (ie): Mar 32

Phenolics
Chemical resistance performance tested: May 60
Consumption statistics, '73 vs. '72: Jan 40
Foam potentials examined: Jun 64
Frictional properties of composite reported (tr): Dec 154
High-temperature mat (nm): Aug 21
Powder coated with epoxy (pl): May 135
Production statistics, 1972-1973 (tr): May 198
Sales statistics, '73 vs. '72: Jan 38
Scrap recycling system (pl): Nov 104
Supply status report: Oct 64
Union Carbide reduces line (pl): Nov 142

Phenylene oxide-based resins
Dishwasher: Sept 83
Electrical outlet boxes (ie): Jul 32
Extrudable resins (nm): Nov 26
Humidifier components (ie): Aug 28
Molded automobile wheelcovers (pl): Jul 99
Recorder case (pl): Jun 137
Smoke detector (ie): Oct 42
Used in appliances (pl): Dec 110

Phonographs, records, tape recorders
Market trends forecast: Jan 5, Feb 5, Mar 5, Apr 5, May 5, Jun 5, Jul 5, Aug 5, Sept 5, Oct 5, Nov 5, Dec 5

Photographic equipment
"Disposable" camera (pl): Feb 114

Pigments —see Colors and coloring

Pipe, hose, tubes
Axial heat pipes (ma): Feb 98
Belling machine, Werco (ma): Oct 104
Buoyant PE pipe used in quicksand (ie): Jul 34
Controls save material in extrusion: Apr 82
Extruded fluoroplastic tubing (nm): Sept 44
Extrusion screw for flame-retarded PP (pl): Mar 94
Fluoroplastics tube connectors (ie): Sept 50
HDPE foam conduits for telephone lines (pl): May 132
Insulation system for fittings (pl): Dec 110
Low-temperature cable for power transmission (tr): Nov 214
PVC compounds for (nm): Oct 26
Sizing control (ma): Apr 130
Stress rupture testing of PVC pipe (tech): Oct 91
Technical reports on (tr): Feb 168
Twin-screw PVC extrusion optimized (eng): Aug 58

Plasticizers
Report on: Sept 62
Survey of phthalate: Apr 52

Plastics industry
Argentina has problems (pl): Sept 154
Canada's best growth year (pl): Jul 18
Consumption statistics, '73 vs. '72: Jan 39
Corrugated finds new markets: Mar 46
Court battle over alleged OSHA safety violations: Feb 51
Decontrol won't increase supplies quickly (pl): Apr 14
Distributor's role: May 51
Educational needs surveyed (tr): Nov 214
Environmental tests show plastics' superiority: Apr 56
Equitable treatment needed for small processors (pl): Feb 20
Ethylene expansions, domestic and foreign (pl): Oct 16
Feedstock resources in U.S. (pl): Jun 20
Feedstocks from coal? (tr): Jun 196
Freight costs: Feb 51
Furniture makers feel resin pinch (pl): Jul 16
Future of plastics in small-car era: Feb 44
Growth outlook for PP (pl): Jan 14
HDPE forecast for 1977 (pl): Nov 18
HDPE supply status report: Jul 52
Ionomer finds new markets (pl): Mar 18
Japanese production, exports in '73: Jan 62
LDPE supply status report: Aug 42
Machinery has good sales year (pl): Aug 70
Machinery—lease or buy: Mar 52
Machinery sales statistics, 1973 vs. 1972: Apr 48
Melamine supply status report: Nov 65
Mergers decline (pl): Nov 142
Mobay posts record gains in 1973 (pl): Mar 117
Moldmakers' shortage offset: Aug 34
Phenolics supply status report: Oct 64
Phthalate plasticizers — short supply, high prices: Apr 52
Plastics good market for organic colorants (pl): Apr 16
Polyester film expands markets: Sept 80
PP supply future brightens (pl): Jul 14
PP supply status report: Sept 78
PVC exports rise, limit production growth (pl): Sept 28
PVC supply status report: May 44
Price controls removed (pl): Mar 14
Price increases foreseen at all industry levels (pl): Jun 18
Public image analyzed (tr): May 200
Puerto Rican developments (pl): Jan 112
Reinforced thermoplastic polyester patent to Celanese (pl): Jul 18

Resin growth prospects, pricing (pl): Nov 20
Resin sales exceeded production in 1973 (pl): May 14
Resin savings through product redesign: Jul 40
Resin stretching by process controls: Apr 65
Resin supply loosens (pl): Dec 18
Sales/earnings in first half 1974 (pl): Sept 32
Sales statistics, '73 vs. '72: Jan 38
Small processors organize to beat resin shortage (pl): Jan 16
Structural foam's future looks good: Mar 38
Styrene prices rise, but more monomer is coming (pl): Oct 16
Styrenics supply status report: Jun 66
Suppliers explain shortages to users (pl): Apr 12
Thermoset foam potentials examined: Jun 64
Urea supply status report: Nov 65
Urethane foams meet their challenges: Jun 73
Urethane supply status report: Dec 60
Waste reclaiming could add 250,000 tons of resin: Feb 38
Year 1972 in review (tech): Feb 70

Plastics materials —see also specific materials
Butadiene styrene vend package (pl): May 138
Coumarone-indene and petroleum resins, sales statistics, '73 vs. '72: Jan 38
De-dusting technology for powders (pl): Sept 150
Exhibited at Europlastique 74: Sept 86
International ISO standards approved (tr): Jan 166
Polyacetal consumption statistics, '73 vs. '72: Jan 40
Polyaryl sulfone superplastics: Mar 49
Polybutadiene resin suitable for electronics (nm): Jan 22
Polyethersulfone available in U.S. (nm): Jun 28
Polyethersulfone superplastics: Mar 49
Polyphenylene oxide's chemical resistance tested: May 60
Polysulfone for heatproof uses (pl): Sept 162
Polysulfone's chemical resistance tested: May 60
Propylene-vinyl chloride copolymer compounds growth cut by energy crunch (pl): Jun 22
Resin switching one way to beat shortages: Jan 48
Starch-based polymer from Japan (nm): Apr 20

Plating and metallizing
Chemicals for (nm): Nov 28
Electroplating growth continues: May 40
Filament improves metallizing (pl): Nov 108
Velours process offered (pl): Aug 72

Polyamide-imide
High-temperature coating (nm): Dec 30
Injection moldable (nm): Nov 26
Superplastics: Mar 49

Polybutylene
Flexible bulk containers (pl): Aug 91
Technical facility opens (pl): Aug 84
Ten new grades (nm): Feb 24

Polycarbonate (PC)
Chemical resistance performance tested: May 60
Cold rolling of (tr): Dec 154
Conductive reinforced compound (nm): Dec 24
Consumption statistics, '73 vs. '72: Jan 40
Giant sign (pl): Mar 120
Glazing for storm doors: May 53
Laminates for security glazing (nm): Nov 31
Nursing bottles injection-blow molded (pl): May 104

Optical coating for (nm): Feb 26, Mar 30
Panels collect solar heat (pl): Jul 99
Sheet in roll form (nm): Apr 29

Polyesters

Abuse tolerances established for injection molded RP (eng): Jun 80
Aromatic copolyester is injection-moldable (nm): Apr 20
Automotive use for thermoplastic (pl): May 132
Barrier bottles for carbonated beverages, outlook for (pl): Aug 14
Celanese expands film plant (pl): Dec 106
Chemical resistance data for Valox (pl): Oct 114
Compression-molded SMC welding torch (ie): Dec 34
Consumption statistics, '73 vs. '72: Jan 40
Curing with azo initiators (tech): Sept 102
Do-it-yourself housing components (pl): Mar 117
Electrical-grade (nm): Jul 22
Fiber output, 1973 (tr): Oct 178
Film decorates kitchen utensils (ie): Dec 36
Film heats mobile homes (pl): Jun 135
Film moves into new markets: Sept 80
High-temperature (nm): Jan 22
Low-shrink RP compounds (nm): Jan 22
Magnesium oxide and hydroxide thickeners for SMC (tech): Nov 94
Metallized film markets, 1967-1977: Dec 46
New markets for thermoplastic: Dec 54
Patent assigned to Carborundum (pl): Nov 142
Polyester/rubber blend SMC (nm): Mar 22
Prestabilized film (nm): May 21
Production statistics, 1972-1973 (tr): May 198
Promoters aid SMC cures (nm): Jun 28
Reclaimed waste adds to supply: Feb 38
RP brine cell covers outlast concrete (pl): Jan 116
RP camper rides above car (ie): Sept 50
RP composites with solid vinyl monomer (tech): Oct 82
RP rod and rope products (tr): Sept 224
RP sandwich-construction smokestack (ie): Feb 30
RP/urethane foam panels molded under vacuum: Jan 56
Reinforced thermoplastic polyester patent to Celanese (pl): Jul 18
Reinforced underground storage tanks (pl): Apr 153
Sales statistics, '73 vs. '72: Jan 38
Electronic medical thermometer (ie): Mar 32
Fire extinguisher handles (pl): Feb 110
Screen mural gives stained glass look (ie): Jan 30
Stuffer for RP (ma): Nov 114
Thermoplastic, for electrical motor (ie): Jan 42
Wire reinforces shoe sharks (ie): Jun 40

Polyethylene (PE)

Adhesive for (nm): Oct 32
Blow molder for HMDPE (ma): Sept 126
Blown film line for HDPE (pl): Apr 108
Bubble cushioning material (nm): Jan 26
Cable reels (pl): May 132
Capless closure for tubes (pl): Oct 124
Carbon black dispersion linked to screen pack plugging (tech): Apr 94
Consumption statistics, '73 vs. '72: Jan 41
Control of yellowing in TiO₂-pigmented HDPE (tech): Jan 78
Coupling agent for CaCO₃ filler in (tech): Dec 68
Creep behavior reported (tr): Dec 154
Cushioning, single-ply (nm): May 21
Drum market booming: Jul 48
Ethylene expansions, domestic and foreign (pl): Oct 16
Ethylene overcapacity coming? (pl): Aug 12

Extruded UHMWPE sheet (nm): Nov 31
Film-foam for packaging (nm): Jan 26
Film-foam solar heating/cooling system: Feb 43
Flame retardant for (nm): Sept 40
Flame-retardant sheet (nm): Sept 40
Foam, perforated (nm): Aug 25
Foam transformer housing saves weight (pl): Aug 91
For industrial containers (pl): Oct 122
Gas-phase polymerization technique (tech): Apr 88
HDPE airplane galley containers (pl): Sept 162
HDPE artificial knee implant (pl): Nov 151
HDPE blow-molding resin (nm): Apr 22
HDPE camper tops are rotationally molded (ie): May 30
HDPE foam conduits for telephone lines (pl): May 132
HDPE for prosthetics (tr): Feb 168
HDPE, forecast for 1977 (pl): Nov 18
HDPE gasoline tanks on U.S. cars (pl): Dec 112
HDPE giant-size pail (pl): Apr 156
HDPE mechanic's creeper rivals wood (pl): Jul 101
HDPE pails, future of: May 48
HDPE "paper" (nm): Aug 25
HDPE resists yellowing (nm): Jan 22
HDPE shipping container is waterproof (ie): May 30
HDPE structural foam makes breakaway road barrier (ie): Jun 38
HDPE supply status report: Jul 52
HDPE thermoformed foldable boat (ie): Dec 34
HDPE tie plate for railroad tracks (ie): May 34
Inks for (nm): Dec 33
Joint replacement prosthesis (tr): Oct 178
Laminating resin for textiles (nm): Aug 25
Low density foam for packaging (nm): May 21
LDPE film supports burn victims for hydrotherapy (pl): Nov 146
LDPE profile extrusion as upholstery component in autos (ie): Oct 44
LDPE supply status report: Aug 42
Multipack from extruded tube (pl): May 135
Pallets get big jobs (pl): Aug 86
Pipe provides buoyancy in quicksand (ie): Jul 34
PS/LDPE blends, improving properties (tr): Apr 214
Price trends, Jan.-May '74 (pl): Jun 18
Production statistics, 1972-1973 (tr): May 198
Recreational vehicle market grows: Nov 62
Road safety barriers (pl): Oct 128
Sales statistics, '73 vs. '72: Jan 38
Spunbonded PE catheter package (pl): May 135
Thermoformed oil can (pl): Jan 116
Supply status update: Oct 65
UHMWPE engineering resin (nm): Jan 22
UHMWPE roller for tire rim (ie): Aug 28
UHMWPE sound-dampening tube for machines (pl): Apr 108
Ultrasonic welding for hollow parts (ie): Jan 32

Polyimides

Film parts and tape (nm): May 21
For high temperature composites (nm): Jun 28
Glass-polyimide laminate for circuit boards (nm): May 24
High-temperature (nm): Sept 34
Superplastics for tough performance: Mar 49

Polymers

Analysis by positron annihilation (tr): Jan 166
Calculation of glass transition (tr): Dec 154
Characterization (tr): Jul 144

Characterization by thermal analysis (tr): Sept 224
Crazing behavior (tr): Mar 168
Degradability conference papers available (tr): Oct 178
Education in (tr): Mar 168
Fracture in (tr): May 200
Future developments (tr): Apr 214
Macromolecular science trends (tr): Jul 144
Membranes in reverse osmosis technology (tr): Apr 214
Microporous polymeric films (tr): Jul 144
Molecular concepts in polymer science (tr): Jun 196
Multicomponent systems (tr): May 198
New industrial (tr): Jun 196
New international publication on (tr): Aug 130
Polymerization engineering (tr): Aug 130
Processing rheology (tr): Aug 130
Structured properties (tr): Aug 130
Substitute for foods in farm equipment testing (tr): Nov 214
Thermal properties of (tr): Mar 168
Thermodynamics of addition polymerization (tr): Feb 168

Polyolefins—see also Polyethylene, Polypropylene

Copolymers and terpolymers available (nm): Aug 21
Fiber output, 1973 (tr): Oct 178
Licenses granted for degradable (pl): Aug 16
Pigments for (nm): May 18
Shrink film (nm): May 21

Polyphenylene sulfide

Chemical resistance tested: May 60
Industrial applications for (pl): Oct 122
Superplastics: Mar 49

Polypropylene (PP)

Automotive-grade resins (nm): Jul 26
Consumption statistics, '73 vs. '72: Jan 42
Crosslinked foam (nm): Apr 29
Expansions brighten supply picture (pl): Jul 14
Extruded foam braiding for mats, baskets (ie): Oct 40
Extrusion screw for flame-retarded pipe (pl): Mar 94
Flame-retardant, transparent (nm): Jul 26
Floor slats rival wood (pl): Jul 101
Foam for furniture: May 47
Foamable, for molding of thick parts (nm): Mar 22
Growth outlook (pl): Jan 14
Hercules bets on packaging future (pl): Oct 114
Hockey rink dasher boards (ie): Jun 42
Housing for vehicular warning light (ie): Feb 32
Microporous film and sheet (nm): Dec 24
New process comes to U.S. (pl): May 10
Price trends, Jan.-May '74 (pl): Jun 18
Production statistics, 1972-1973 (tr): May 198
Sales statistics, '73 vs. '72: Jan 38
Solvay's active-catalyst process (pl): Jul 14
Structural foam collapsible kitchen (ie): Sept 48
Supply status report: Sept 78
Thermoformed oil can (pl): Jan 116
Tower packing for antipollution equipment (ie): Mar 34
Twine mops up oil spills (ie): Nov 42

Polystyrene (PS)

Degradation during extrusion (tr): Apr 214
Disposable foodware system introduced (pl): Dec 106
Fire-safe TV cabinets may cut PS use: Sept 74
Foam consumption statistics, '73 vs. '72: Jan 44
Foam cups recycle into shoe heels (tr): Oct 178

Foam insulates Alaska pipeline (pl): Oct 116
Foam-insulated food chest (ie): Nov 42
Foam pallet legs (pl): Jun 137
Foam replaces wood for tool handle (ie):
Jul 32

Foam window frames (pl): Dec 112
Licenses granted for degradable (pl): Aug 16
New Foster Grant plant opens (pl): Mar 114
New supplier (pl): May 12
PS/LDPE blends, improving properties (tr):
Apr 214
Prices continue up; more monomer coming
(pl): Oct 16
Price trends, Jan.-May '74 (pl): Jun 18
Production statistics, 1972-1973 (tr):
May 198
Reclaiming foam (pl): May 98
Sales statistics, '73 vs. '72: Jan 38
Shoe shank reinforced with polyester wire
(ie): Jun 40
Structural foam pallets are reusable (pl):
Feb 110
Structural foam radio chassis (ie): Oct 40
Supply status report: Jun 66
Supply status update: Jul 53, Oct 65
Ultrasonic welding for hollow parts (ie):
Jan 32

Polyvinyl chloride (PVC) — see also Vinyls

Acrylic/PVC boat toilet (pl): Jan 116
Additives protect against fungi and bacteria
(nm): Jan 24
Adhesive, reinforcing agent for (nm):
Mar 30
Childproof blister pack (pl): Aug 93
Computer-formulated compounds (tech):
Jun 96
Consumption statistics, '73 vs. '72: Jan 43
Creep behavior reported (tr): Dec 154
Do-it-yourself housing components (pl):
Mar 117
Export rise limits resin growth (pl): Sept 28
Feedstock shortages, federal problems (pl):
May 10
Flexible bulk containers (pl): Aug 91
FDA watches extraction (pl): Jun 22
Heat stabilizer for (nm): Jan 24
Insulation system for pipe fittings (pl):
Dec 110
Liquid stabilizer for (nm): Sept 36
Microporous film and sheet (nm): Dec 24
Mixing-cooling systems for (ma): Apr 122
New plant for (pl): May 126
New plants in Canada, Puerto Rico (pl):
Oct 119
OSHA hearings on VCM allow industry to
state its position (pl): Aug 12
Pipe compounds (nm): Oct 26
Powder for cellular profiles (nm): Jan 24
Powder processing (tr): May 198
Price trends, Jan.-May '74 (pl): Jun 18
Properties improved by irradiation crosslinking
of monomers (tech): Aug 66
Property studies of (tr): Feb 168
Puerto Rican developments (pl): Jan 112
Reclaimed waste adds to supply: Feb 38
Rigid injection molding compounds (nm):
Jan 22
Safety data needed for food packages (pl):
Feb 18
Sales statistics, '73 vs. '72: Jan 38
SPE Retec probes VCM standards (pl):
Dec 104
SPI's summary interpretation of OSHA VCM
standard: Dec 100
Stabilizers for (nm): Apr 27, May 21
Storm windows and door trim (pl): Nov 151
Stress rupture testing of pipe (tech): Oct 91
Supply status report: May 44
Supply status update: Jun 68, Sept 79,
Dec 62
Toxicity questions on meat-wrap film (pl):
Mar 16

Twin-screw pipe extrusion optimized (eng):
Aug 58
Vacation home from PVC "logs" (pl): Feb 104
VCM regulations change outlook (pl): Oct 20

Prices — see also Plastics industry

Controls removed (pl): Mar 14
Decontrol won't lead to more supplies (pl):
Apr 14
Increases (pl): Jan 112
Increases foreseen at all industry levels (pl):
Jun 18
More increases noted (pl): Aug 84
More price hikes (pl): Mar 114
More price hikes in chemicals, resins, finished
goods (pl): Feb 104
Resin growth prospects cloud price picture
(pl): Nov 20
Styrene prices continue to rise (pl): Oct 16

Printing — see also Decorating

Direct impression printer, Matthews (ma):
Sept 128
Four-color offset printer, APM (ma): Sept 132
Printing plate market grows: May 56
Web decoration helped by automated controls:
Jul 44

Processing

Abuse tolerances for injection molded
reinforced polyester (eng): Jun 80
Advances in (tr): Apr 214
Anticipatory control stabilizes extrusion
temperatures (pl): Feb 88
Cold compaction from powder (pl): Dec 78
Cold-rolling PC (tr): Dec 154
Computer-designed drying systems for resins
(eng): Dec 64
Control via ram position regulation (eng):
Oct 74
DIS screw homogenizes melt (pl): Sept 116
Electromechanical vibration welding technique
introduced (pl): Dec 84
Energy-saving machines (pl): May 96
Foamax flexible urethane foam process
licensed (pl): Oct 96
Low-pressure sandwich molding for structural
foam: Apr 58
Mechanized production makes large RP parts
competitive with metal (eng): Feb 66
Molding area diagram approach to thermoset
injection molding (eng): Jul 62
New technologies for big appliances: Apr 44
Oil-free air for plants (pl): Sept 120
Plant-wide computerized control system (pl):
Dec 76
Poromerics produced by electron beams (tr):
Oct 178
Powder processing of PVC (tr): May 198
Radiation curing of plastics: Nov 55
Reaction injection molding: Jun 54
Rheology of polymer (tr): Aug 130
Spraymould—new molding process (pl):
Apr 104
Structural foam molding with counterpressure
(tr): Jul 144
Thermofoaming molding technique: Jul 47
Thermoforming economies from cavity-
pinching tools: Oct 68
U.S.S.R., efficiency survey of (tr): Jul 144
Vacuum molding for RP/urethane foam panels:
Jan 56

Propylene — see Feedstocks

R

Radiation

Plastics curing use increases: Nov 55

Radio and television

Fire-safe TV cabinets: Sept 74
Flame-retardant parts tough hurdle for
colorants (pl): Dec 20

Market trends forecast: Jan 5, Feb 5, Mar 5,
Apr 5, May 5, Jun 5, Jul 5, Aug 5, Sept 5,
Oct 5, Nov 5, Dec 5
Structural foam radio chassis (ie): Oct 40

Refrigerators and refrigeration

Market trends forecast: Jan 5, Feb 5, Mar 5,
Apr 5, May 5, Jun 5, Jul 5, Aug 5, Sept 5,
Oct 5, Nov 5, Dec 5

Recycling — see Waste disposal and recovery

Reinforced plastics (RP)

Abuse tolerances established for injection
molded polyester (eng): Jun 80
Bricklin automobile has reinforced acrylic
body (pl): Aug 84
Brine cell covers outlast concrete (pl):
Jan 116
British fuel tanker (pl): Sept 160
Camper rides above car (ie): Sept 50
Conductive PC compound (nm): Dec 24
Corrosive chemical transported in vinyl ester
trailer (ie): Oct 42
Diamond-powder tools for machining (pl):
Sept 118
Do-it-yourself housing components (pl):
Mar 117
Evaluation program (pl): May 126
Filament-reinforced foam synthetic wood (pl):
Sept 118
Filament winding bath, Venus (ma): Apr 124
Filament-wound smokestack for paper plant
(ie): Nov 40
Fittings meet steel specs (pl): May 138
Glass chopper-dispenser, Binks (ma): Nov 122
Grating panel resists corrosion (pl): Feb 110
Helmets for outer space are flame-resistant (ie):
May 34
Hockey rink dasher boards (ie): Jun 42
Housing components tested (tr): Aug 130
Liner for smokestack (ie): May 32
Low-shrink polyester (nm): Jan 22
Mechanized production makes large parts
competitive with metal (eng): Feb 66
Modular beauty clinic is transportable (ie):
Mar 34
Polyester consumption statistics, '73 vs. '72:
Jan 43
Powder coating of (pl): Oct 114
Pultrusion boom in 1974: Feb 48
Railcar panels protect against vandalism (pl):
Aug 93
Recreational vehicle market grows: Nov 62
RP/Composites Conference 1974, advance
report on: Jan 102
RP/Composites Conference 1974, report on
(pl): Apr 134
RP/Composites Conference 1975, advance
report on: Dec 92
RP/urethane foam panels molded under vacuum:
Jan 56
Resin extender (nm): Oct 36
Rod and rope products (tr): Sept 224
Smokestack has sandwich construction (ie):
Feb 30
Solid vinyl monomers for composites (tech):
Oct 82
Sprayup gun, Johnson (ma): Apr 124
Sprayup unit saves resin (pl): May 104
Sprayup system for (ma): Apr 122
Stuffer for reinforced polyester (ma): Nov 114
Triangular modular housing system (pl):
Apr 156
Underground storage tanks (pl): Apr 153
Users' guide to (pl): Apr 108

Reinforced thermoplastics (RTP)

Asbestos fillers enhance thermoplastics (nm):
Jul 22
Compounding system developed: Apr 60
Conductive nylon (nm): Sept 34
Consumption statistics, '73 vs. '72: Jan 43

Glass-reinforced nylons (nm): Apr 25
 Parts produced by metal-stamping system (eng): Jan 70
 Reinforced thermoplastic polyester patent to Celanese (pl): Jul 18

Reinforcements — see *Fillers and reinforcements*

Release agents

Liquid "honey wax" (nm): Sept 44
 Resin-based coating (nm): Sept 44
 Silicone polymer blend (nm): Sept 44

Robots

Trade group formed (pl): Oct 98

Rotational molding

Machinery sales statistics, 1973 vs. 1972: Apr 48
 Thermodynamic machines, Versatile (ma): Mar 100

S

Safety

Bricklin all-plastics car built for safety (pl): Aug 84
 Cellulose acetate butyrate sheet functions as machine guard (ie): Aug 30
 Childproof blister pack (pl): Aug 93
 Colorants affected by food-contact housewares regulations: Oct 66
 Court battle over alleged OSHA safety violations: Feb 52
 Data needed on PVC food packages (pl): Feb 18
 Elimination of VCM hazard in workplace (pl): Apr 14
 Fire detection system is "foolproof" (pl): Jun 110
 Fire-safe TV cabinets: Sept 74
 Foam-flammability issue settled? (pl): Sept 30
 FDA toughens PVC extraction test rules (pl): Jun 22
 Foods-safety of ABS and nitriles (pl): Dec 18
 HDPE structural foam makes breakaway road barrier (ie): Jun 38
 Machine shutdown control (ma): Jul 88
 NIOSH prepares for crises: Jun 58
 Nitrile-based resin meets toxicity and ecology questions (pl): Jan 16
 OSHA hearings on VCM allow industry to state its position (pl): Aug 12
 OSHA injection machine rules (pl): Jun 104
 OSHA ruling on VCM exposure levels (pl): Nov 20
 PC laminates for security glazing (nm): Nov 31
 PE road barricades (pl): Oct 128
 RP panels protect railcars against vandalism (pl): Aug 93
 "Safe" urethane plant opens (pl): Nov 142
 Safety center opens (pl): Mar 112
 Sealed handling system for urethane elastomers (ma): Feb 96
 Shrink-film pallet wraps not fire hazard (pl): Feb 16
 SPE Retec probes VCM ruling (pl): Dec 104
 SPI submits proposed standards (pl): Dec 82
 SPI's summary interpretation of OSHA VCM standard: Dec 100
 Toxicity questions on PVC meat-wrap film (pl): Mar 16
 Toy-makers ask for rules (pl): Feb 106
 UHMWPE roller for automobile tire rim reduces blowout hazard (ie): Aug 28
 Urethane foams meet challenge: Jun 73
 VCM regulations change PVC outlook (pl): Oct 20
 VCM regulations must be guided by reason, not hysteria (ed): Aug 33

Sealing machines and equipment

Air-operated, Errich (ma): Mar 104
 Hydra Sealer for hollow parts (ma): Mar 104
 Jet-Melt bonding system, 3M (ma): Mar 104
 Press for PVC, Thermo-Dielectric (ma): Dec 90
 Table-model heat sealer, Thermo-Dielectric (ma): Nov 120

Sensors

Analog meter, Hy-Cal (ma): May 118
 Cavity melt temperature, Sensor Dynamics (ma): Dec 88
 Digital pressure transducer, UniMeasure (ma): Oct 108
 Digital temperature indicator, Omega (ma): Apr 130
 Digital thermocouple indicator, Doric (ma): May 114
 Digital thermometers, Fluke (ma): Aug 78
 Electronic digital readout (ma): Apr 128
 Flowmeters, Perfecting (ma): Apr 130
 Infinite resolution monitors, CIC (ma): Jun 122
 Infrared unit detects transient melt temperatures (tech): May 78
 Inventory measurement, DSC (ma): Jan 96
 Lasers are new tool for processors: Aug 38
 Level indicator and controller, Prince (ma): Sept 136
 Level indicators, Metritape (ma): Jan 96
 Low-pressure transducer, Tyco (ma): Oct 108
 Melt pressure transducer, Gentran (ma): Jul 88
 Miniature transducer, ITI (ma): Jun 122
 Moisture gage, Microwave (ma): Apr 128
 Modular digital temperature indicator (ma): Nov 122
 Multizone thermocouple selector switch, West (ma): Mar 104
 Noncontact thermometer, Barnes (ma): May 114
 Noncontact thermometer, Land (ma): Sept 136
 Noncontact thermometer, Vanzetti (ma): Aug 80
 Noncontact thermometer, Williamson (ma): May 118, Aug 78
 Noncontact thermometers, Spectran (ma): Jul 88
 Noncontact thickness gages, Schaevitz (ma): Nov 122
 Oxygen monitor, Research Inc. (ma): Oct 108
 Pressure transducer, Sensotec (ma): Jun 122
 Pressure transducers, Gentran (ma): Jun 122
 Pressure transmitters, Computer Instruments (ma): Oct 108
 Process trends monitored by video (ma): Jan 94
 Recorder, Chessell (ma): Apr 128
 Refractometer, Anacon (ma): Apr 130
 Safety unit, Capitol Temptrol (ma): Jul 88
 Signal transmitter, Metrix (ma): Apr 130
 Smoke detector redesigned in phenylene oxide-based resin (ie): Oct 42
 Static sensing probe, Drexelbrook (ma): Apr 128
 Strip chart recorder, Sensotec (ma): Aug 80
 Temperature indicator, Syscon (ma): Apr 128
 Temperature transmitter, ITT Barton (ma): Apr 130
 Temperature transmitters, Foxboro (ma): Apr 130
 Tension and compression gages, Chatillon (ma): Jan 96
 Thermal imaging system, Dynarad (ma): Sept 136
 Thermocouple selector, Sentel (ma): Aug 80
 Thermocouples, RdF (ma): Aug 80
 Thickness head, GE (ma): Dec 88
 Thickness-measuring, Schaevitz (ma): Jul 88
 VCM monitors, Devco (ma): Jun 122
 Voltmeter, Enviro/Tech (ma): Apr 128

Web inspection system, Intec (ma): Jun 122
 Web tension, Stevens (ma): Jun 122

Sheet — see *Film and sheet*

Sheet molding compound (SMC)

Compression-molded camper tops (ie): May 30
 Compression-molded RP pail (ie): Jul 34
 Compression-molded welding torch (ie): Dec 34
 Magnesium oxide and hydroxide thickeners for polyester (tech): Nov 94
 Phenolic mat, high-temperature (nm): Aug 21
 Polyester-rubber blend for (nm): Mar 22
 Promoters aid cures (nm): Jun 28

Shoes

Polyester wire reinforces shanks (ie): Jun 40
 Poromerics produced by electron beams (tr): Oct 178
 Recycled PS foam cups for shoe heels (tr): Oct 178
 Thermoplastic elastomers in: Dec 50

Shortages — see also *Plastics industry*

Expansions show optimism despite shortages (pl): Jan 110
 Furniture makers feel resin pinch (pl): Jul 16
 Japanese production down in '73: Jan 61
 Materials suppliers explain shortages to customers (pl): Apr 22
 Phthalate plasticizers in short supply: Apr 52
 PVC feedstock (pl): May 10
 Resin savings through product redesign: Jul 40
 Resin stretching by process control: Apr 65
 Resin stretching with fillers: Jan 50
 Resin supply loosens (pl): Dec 18
 Resin swap plan instituted (pl): Dec 106
 Resin switching one way to beat shortages: Jan 48
 Schulman copes with resin shortage (pl): Mar 112
 Small processors need equitable treatment (pl): Feb 20
 Small processors organize to get resin (pl): Jan 16

Shows — see *Expositions*

Silicones

Adhesives for PE and PP (nm): Jun 32
 Coating for semiconductors (nm): May 26
 Mold material (nm): Dec 33
 Surfactant for urethane foams (nm): Apr 25

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